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Targeted procurement: A means by which socio-economic objectives can be realized through engineering and construction works contracts

Synopsis

Targeted procurement in a practical, pragmatic and measurable manner enables government to achieve certain socio-economic objectives, as set out in the Reconstruction and Development Programme, through engineering and construction works contracts. It enables organs of state to operationalize policies in a targeted, transparent, visible and measurable manner when engaging in economic activity with the private sector, without compromising principles such as fairness, transparency, competition, cost-efficiency and equitability. The paper sets out what targeted procurement is, how it works and the range of socio-economic objectives it can achieve in the South African context. Case studies of its application by the national Public Works Department and the Southern Metropolitan Local Council (Johannesburg) are presented.

Samevatting

Geteikende verkryging op 'n praktiese, pragmatiese en meetbare wyse verskaf vir die regering die geleentheid om, deur middel van ingenieurs- en konstruksiekontrakte, bepaalde sosio-ekonomiese doelwitte te behaal soos in die Heropbou- en Ontwikkelingsprogram uiteengesit. Dit laat staatsinstellings toe om staatsbeleid in werking te stel op 'n doelgerigte, deursigtige, sigbare en meetbare wyse wanneer die privaatsektor by ekonomiese aktiwiteite betrek word, sonder dat beginsels soos billikheid, deursigtigheid, mededinging, kostedoeltreffendheid en regverdigheid ingeboet word. Die referaat beskryf geteikende verkryging, sy werkwyse en die bereik van die sosio-ekonomiese doelwitte wat binne die Suid-Afrikaanse verband behaal kan word; gevallestudies van sy toepassing deur die nasionale Departement van Openbare Werke asook die Suidelike Plaaslike Owerheid (Johannesburg) word aangebied.

Curricula vitae of authors appear on the next page

Introduction

The environment in which South Africans find themselves is very different from that of a decade ago. Governance has been placed in the hands of democratically elected representatives of all population groups, discriminatory laws that socially and economically advantaged certain sectors of the economy have been repealed and a new constitution has come into effect. South Africa is also no longer isolated from the rest of the world. New policies have come into effect or are being developed.

In 1994, following the first democratic election in South Africa, the Government adopted the Reconstruction and Development Programme, a comprehensive socio-economic policy instrument aimed at eradicating the legacy of apartheid, which had left South Africa with an economy that was inward focused, distorted by growth inequities, inefficiencies and underdeveloped resources and markets. The macro-economic Growth, Employment and Redistribution (GEAR) strategy was published in 1996, as was the National Small Business Bill. Government released its green paper on Public Sector Procurement Reform in South Africa in April 1997.

There is a definite relationship between employment opportunities, available skills, entrepreneurship and the use of small enterprises in the construction and maintenance of assets (Watermeyer and Band, 1994). The strength of these relationships and links is, however, dependent on the strategies adopted in programmes aimed at the provision of such assets, in particular those strategies associated with engineering and construction contracts. The construction and procurement strategies adopted can be used to address social and economic concerns and, depending upon how they are structured, to facilitate the economic empowerment of marginalized sectors of society and to address unemployment in a focused manner. Thus the process of constructing assets can be just as important as the provision of the assets themselves.

The Reconstruction and Development Programme (RDP, 1994) recognizes the potential for human resource development through construction projects and contains recurrent themes, which call for:

- The putting in place of a programme of affirmative action to address the deliberate marginalization from economic, political and social power of black people, women and rural communities and to empower communities and individuals from previously disadvantaged sectors of society
- The development of small business, particularly those owned and operated by black entrepreneurs
- The provision of jobs and the addressing of unemployment

The potential of procurement as an instrument of policy

Governments have traditionally used their extensive powers of procurement to promote a variety of objectives unconnected with the immediate objective of the procurement. Internationally, these have ranged from the protection and development of national industry to social policy goals such as the promotion of equal opportunity (Arrowsmith, 1995).

The very size of government markets provides significant opportunities to influence the economy. The Atkinson study for the European Commission concluded that in 1984 procurement of public bodies and nationalized industries accounted for 21,8 per cent of gross domestic product in the United Kingdom and about 15 per cent across the European Community (Arrowsmith, 1995).

The Green Paper on Public Sector Procurement Reform in South Africa (1997) suggests that public sector procurement can be used as a tool by government to achieve economic ideals, including certain socio-economic objectives. This paper suggests that government's socio-economic objectives may be described as being:

- The development of small, medium and micro enterprises, particularly those owned and operated by previously disadvantaged individuals
- Increasing of the volume of work available to the poor and the income generation of marginalized sectors of society
- Affirmative action to address the deliberate marginalization from economic, political and social power of black people, women and rural communities and to empower communities and individuals from previously disadvantaged sectors of society

The support of domestic capability in fields of high technology has been a prominent feature of policy in areas such as telecommunications, pharmaceuticals and information technology, often justified on the basis of 'infant industry' arguments. In areas of regional policy, procurement preference schemes were first introduced in the 1930s to assist areas hit by the Great Depression, and following the Second World War further schemes were adopted, some of which survived in Europe until 1991. Under the 'General Preference Scheme' guidelines were issued that provided for government bodies to let contracts to firms in development areas, subject, however, to the products offered being equivalent to those available elsewhere, whilst the Special Preference Scheme provided that where supplies tenders were received from firms in the areas that equalled other tenders in all but price, these firms should be permitted 25 per cent of an order, provided that the price was lowered to involve no extra cost. A special scheme in Northern Ireland provided for a five per cent price preference for tenders where this would benefit employment in Northern Ireland (Arrowsmith, 1995).

A recent study undertaken for the European Community cites five principle domestic (as distinguished from foreign policy) socio-economic or political functions that public sector procurement may be used to achieve, in addition to obtaining the required goods and services. These are (McCrudden, 1995):

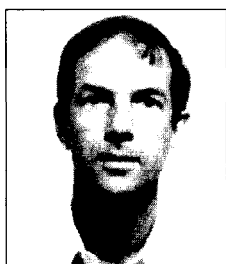
1. To stimulate economic activity
2. To protect national industry against foreign competition
3. To improve the competitiveness of certain industrial sectors
4. To remedy regional disparities
5. To achieve certain more directly social policy functions such as fostering job creation, promoting fair labour conditions, promoting the use of local labour, prohibiting discrimination against minority groups, improving environmental quality, encouraging equality of opportunity between men and women or promoting the increased utilization of the disabled in employment

Economic empowerment amongst the people of South Africa through construction contracts and a structure of industry in which firms of all sizes operating within this sector reflect the South African demographic composition will not happen without a certain amount of intervention. Such intervention needs to address restrictive and inflexible forms of procurement relating to the manner in which contracts are conceived and packaged, evaluated and awarded.

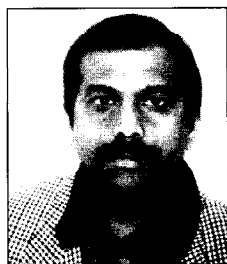
Historically, contracts have been structured in such a manner that the well established contractor and, particularly in the civil engineering sector, the large contractor are favoured. Contracts have invariably required contractors to have all the necessary resources and technical, managerial, administrative and commercial skills, and to finance all aspects of the works. Decisions regarding the size and composition of contracts have not taken any developmental objectives into consideration and have generally been structured to facilitate participation by large well-established contractors. These practices have not encouraged the development and participation of small, medium and micro enterprises and have favoured plant-based construction practices, which has in turn not allowed this sector to achieve its employment potential.

At the same time contracts have historically been awarded to the lowest tender, ie on the basis of the lowest financial offer, as this has been considered to represent value for money. Generally, the lowest tender is overlooked only when there is clear evidence that the tenderer does not have the necessary experience or capacity to undertake the work or is financially unsound, ie when the risk of failure to complete the contract satisfactorily is high. This narrow interpretation of value for money does not permit development objectives to be achieved and evaluated, nor does it take cognisance of socio-economic factors such as the fact that there is a cost to the State for unemployment.

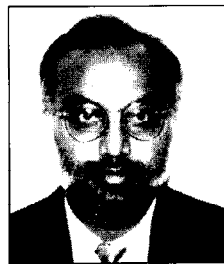
The international tendency is to define value for money in terms of quality, quantity, timeliness, price and source (Malaysian Government, 1997) and to accord direct preferences in order to stimulate the growth of local industries or to encourage and support the evolvement of indigenous en-



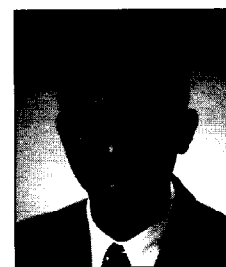
Ron Watermeyer graduated from the University of the Witwatersrand with a civil engineering degree in 1978. As a bursar he joined the then SA Railways and Harbours, where he gained extensive experience in building and civil construction and structural engineering. In 1988 he joined Soderlund & Schutte Inc, becoming a director in 1990. He has in recent years been very active in the fields of contractor development, labour-based construction and housing standards. In 1995 he was appointed a member of the Procurement Reform Task Team and has been involved in the development of affirmative procurement policies, taking the lead role in the development of procurement systems and associated documentation to enable socio-economic objectives to be linked to public sector procurement. He is currently the chairman of the Joint Structural Division and a founding partner of Strategic Procurement Systems.



Sivi Gounden graduated as a civil engineer at the University of Durban Westville in 1983. His work has focused on developmental issues within the built environment ranging from policy formulation through to project implementation. He has led several urban infrastructure and upgrade programmes, focusing on community-based delivery models. In 1994 he was appointed Special Advisor to the Minister of Public Works and was responsible for the development of policy guidelines for the appointment of built environment consultants by the Department of Public Works (DPW), the review of public sector procurement and the co-ordination of a government review of the construction industry. In September 1995 he was appointed Deputy Director-General: Property Development in the DPW. He was the co-chairperson of the Public Sector Procurement Forum, tasked with the development of a new policy framework for public sector procurement.



Deen Letchmiah graduated from the University of Natal as a quantity surveyor in 1978. In 1984 he established his own practice and is currently the managing partner of Letchmiah Daya Mundindi and Strategic Procurement Systems. He has been very active in development issues in the built environment, being a founder member of the Built Environment Action Movement, deputy chairperson of the SABTACO KwaZulu-Natal Region, and an advisor/consultant to various organizations. He has also acted as a consultant on the Durban International Convention Centre project and was a contributor to the Construction Protocol. In 1995 he was appointed the leader of the Procurement Reform Task Team. He has recently presented various papers and lectures on procurement reform in South Africa.



Siphso Shezi completed a BA degree, majoring in Politics and English, at the University of Natal in 1987. During his graduation year he was offered a scholarship at Lancaster University, where he obtained a Diploma in International Relations in 1988 and a year later an MA at Sussex University. In 1992/93 he attended the John Hopkins University in the USA, where he undertook postgraduate studies in international studies. Whilst a lecturer at the University of Natal, he founded the Imbali Rehabilitation and Reconstruction Programme. In 1994 he was appointed a Special Advisor to the Minister of Public Works and was responsible for the change management and restructuring of the DPW and the co-ordination and execution of the National Public Works Programme. In May 1995 he was appointed Director-General of the DPW.

trepreneurs. Alternatively, set-aside or reserved procurement strategies are used to encourage participation by targeted groups in government contracts (Arrowsmith, 1995).

The challenge, however, is to create a cost-effective system of encouraging and promoting Government's socio-economic objectives through procurement in a definable, quantifiable, measurable, verifiable and auditable manner in a fair, equitable, competitive and transparent environment without:

- taxing the administrative capacity of the organs of state
- creating unfair competition within sectors of the economy
- abusing or lowering labour standards
- exposing organs of state to unacceptable risks
- compromising value for money
- compromising the efficiency and effectiveness of the construction sector

Constitutional provisions pertaining to procurement

South Africa is one of the few countries in the world in which procurement is a subject of the nation's constitution. Section 217 of the Constitution of the Republic of South Africa (Act 108 of 1996) reads as follows:

- (1) *When an organ of state in the national, provincial or local sphere of government, or any other institution identified in national legislation, contracts for goods or services, it must do so in accordance with a system which is fair, equitable, transparent, competitive and cost effective.*
- (2) *Subsection (1) does not prevent the organs of state or institutions referred to in that subsection from implementing a procurement policy providing for:*
 - (a) *categories of preference in the allocation of contracts; and*
 - (b) *the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination*
- (3) *National legislation must prescribe a framework within which the policy referred to in subsection (2) may be implemented.*

Section 217, however, needs to be read in conjunction with portions of Section 146 of the constitution, which reads as follows:

- (1) *National legislation that applies uniformly with regard to the country as a whole prevails over provincial legislation, if any of the following conditions are met: ...*
- (b) *The national legislation deals with a matter that, to be dealt with effectively, requires uniformity across the nation, and the national legislation provides that uniformity by establishing:*
 - (i) *norms and standards*
 - (ii) *frameworks; or*
 - (iii) *national policies*
- (c) *The national legislation is necessary for: ...*
 - (ii) *maintenance of economic unity;*
 - (iii) *the protection of the common market in respect of the mobility of goods, services, capital and labour;*
 - (iv) *the promotion of economic activities across provincial boundaries;*
 - (v) *the promotion of equal opportunity or equal access to government services.*

Accordingly, any measures taken to meet socio-economic objectives must comply with the provisions of the constitution.

Targeted procurement

The process of procurement reform in South Africa

Immediately after the national elections in 1994, the Ministry of Public Works identified an urgent need for public sector procurement reform for construction projects. After an initial review of the regulatory environment that impacted upon procurement, it was concluded that public sector procurement reform could not be undertaken on a sector by sector basis, as a fundamental review of the entire public sector procurement system was required. This resulted in a joint initiative by the Ministries of Public Works and Finance.

A Procurement Forum was established to oversee this initiative. A Procurement Task Team was appointed, comprising officials from the office of the State Tender Board and consultants from the private sector, to research and draft policy proposals for consideration by a policy unit comprising the Minister of Public Works, the Deputy Minister of Finance and senior officials from the departments of State Expenditure, Public Works,

Trade and Industry and Arts, Science, Culture and Technology. The Procurement Task Team was funded by a grant obtained from the World Bank by the present Minister of Public Works prior to the 1994 elections. The process of reform commenced with interaction within government on 24 January 1995. A Government Forum comprising representatives from various state and provincial user departments was established in order to arrive at a consensus as to what restructuring was necessary and what was possible in the short, medium and long terms.

At the outset, it was recognized that legislation following a White Paper on procurement would be required to operationalize all reform policy proposals. As a result, the task team was required to develop interim policy proposals that could be implemented within the ambit of existing legislation until such time as the reform process had run its course. A Ten Point (Interim Strategies) Plan was adopted by the Cabinet in November 1995. The 10 points of this plan encompassed the following strategies:

1. Improving access to tendering information.
2. The development of tender advice centres.
3. Broadening the participation base for contracts of less than R7 500.
4. The waiving of security/sureties on construction contracts with a value of less than R100 000.
5. The unbundling of large projects into smaller contracts.
6. The promotion of early payment cycles by government.
7. The development of a preference system for small and medium enterprises owned by historically disadvantaged individuals.
8. The simplification of tender submission requirements.
9. The appointment of a procurement ombudsman.
10. The classification of building and engineering contracts.

The Ten Point Plan remains the Government's procurement policy. The State Tender Board during 1996 adopted the plan subject to the Minister of Finance clarifying the price preferences referred to in respect of construction projects. The Minister of Finance approved a 90/10 development objective/price mechanism in respect of engineering and building contracts.

A *Green Paper on Public Sector Procurement in South Africa* was released with the full endorsement of the national cabinet in April 1997. The Ministry of Finance has been tasked with the preparation of a White Paper on public sector procurement. All the principles contained in the Ten Point Plan have been incorporated into the Green Paper.

The Procurement Task Team has developed a new form of procurement that enables certain aspects of the 10 point plan to be implemented in an efficient and effective manner, viz targeted procurement. Targeted procurement in a practical and pragmatic manner affirms the changed environment in South Africa, government's socio-economic objectives and the principles of the RDP. It enables organs of state to operationalize policies in a targeted, transparent, visible, measurable, auditable and verifiable manner when engaging in economic activity with the private sector, without compromising principles such as fairness, competition, cost-efficiency and inclusion. This is achieved through a combination of:

- The classification of contracts
- The use of resource specifications, and
- The use of development objectives/price mechanisms

Participative programmes aimed at the engagement of small, medium and micro enterprises owned by previously disadvantaged persons and increasing the volume of work available to the poor and income generation within the marginalized sectors of society have been developed.

Resource specifications

Resource specifications govern the manner in which prime or main contractors structure and marshal their resources in order to meet their contractual obligations. They define and set goals for targeted small, medium and micro enterprise participation or the engagement of targeted labour/local resources in contracts in such a manner that they can be quantified, measured, verified and audited. Resource specifications require prime contractors to 'unpack' their contracts into smaller contracts in order to procure the services of targeted small, medium and micro enterprises and to administer such contracts. Alternatively, they require prime contractors to structure their resources in the performance of their contracts in order to provide work opportunities for targeted labour or to measure the increase in the number of employment opportunities generated per unit of expenditure or to engage in joint ventures with targeted groups.

The Procurement Task Team has through the Procurement Forum released the following resource specifications:

- APP1: The Targeting of Affirmable Business Enterprises
- APP2: Structured Joint Ventures (General)
- APP3: Structured Joint Ventures (Targeted)
- APP4: Targeting of Local Resources
- APP5: Engagement of Targeted Labour
- APP6: Engagement of Affirmable Professional Service Providers

Typically, these specifications provide for:

- The setting of targets (contractual goals) to secure the participation of the targeted group; and
- The measurement of key participation indicators to be used in the evaluation of tenders and the audit of participation compliance during the execution of the contract

Each specification:

- Establishes the general principles for the participation by the targeted group
- Provides information on the contractual goals and how the goal may be achieved
- Specifies requirements for contractors and how they may fulfil these requirements
- Defines and interprets the words and expressions
- Provides for measures that the employer has at his disposal to remedy or penalize non-compliance

Resource specifications are in fact performance specifications that in the first instance define the socio-economic deliverable and in the second instance set out the method by which the deliverables can be attained, audited and verified and the means by which progress towards the attainment of the deliverable may be quantified at discrete intervals.

Contract classification

The Procurement Forum recognized that a classification of contracts is required to enable contracts to be:

- Packaged (unbundled) in a manner that facilitates targeted small, medium and micro enterprise participation; or
- Structured in a manner to permit emerging/historically disadvantaged contractors to participate, develop and be integrated into the mainstream of the economy

The Procurement Task Team in the Ten Point (Interim Strategies) Plan (1995) developed such a classification by classifying contracts in the first instance on the basis of risk to the parties and the scale of the resources required to execute a contract (class) and in the second instance of who the contracting parties are (type).

Class of contract: Contracts may be classified on the basis of risk to the parties and the scale of the resources required to execute the contract as follows:

- International
- Major
- Micro
- Minor

The Ten Point Plan defines minor contracts in terms of size, complexity, novelty/innovation, intensity (speed of design and construction), physical location, likelihood of variations in scope, quality of completed works and responsibilities, viz a contract in which:

- The risks for both contracting parties are adjudged to be small
- The period for completion of the contract does not normally exceed six months and certainly not 12 months
- The contract value is usually less than R1 million, but in no circumstances exceeds R2 million
- The works are of a straightforward nature and the possibility of significant variation from the work envisaged is adjudged to be relatively low
- The site establishment requirements are adjudged not to be onerous
- The contractor has no responsibility for the design of the permanent works other than for possible minor items
- The design of the works, save for design work for which the contractor is made responsible, is complete in all essentials before tenders are invited
- The contractor's responsibility for the appointment of nominated/selected subcontractors is limited

- The contractor is not required to undertake work of a specialist nature

Major contracts have more onerous requirements than minor contracts. International contracts are those in which the bulk of the components, materials and goods are likely to be manufactured or fabricated by foreign contracting entities and the domestic content, if any, is likely to be a relatively small component. Micro contracts, on the other hand, are contracts that have less onerous requirements than minor contracts.

Type of contract: Contracts may also be classified in terms of who the contracting parties are, as follows:

- Prime
- Structured joint ventures
- Development

This classification of contracts is based on the premise that construction is the synthesis of four functional activities, viz construction management, materials management, materials supply and physical work (labour, plant and equipment).

A prime contract is accordingly a contract in which:

- The contractor has the resources to perform all these functional activities unassisted by other contracting parties, separately appointed by the employer; or
- The contractor has the resources to perform some of the functional activities and is able to marshal resources for the remainder

A structured joint venture contract is a contract in which:

- The senior joint venture contractor is a prime contractor and the junior partner, who may lack skills in certain functional areas, is able, through the joint venture formation, to participate and develop in these areas; or
- Both joint venture partners may be prime contractors, with one of the parties having limited resources and capacity

A development contract is a contract in which:

- The employer appoints third parties to provide certain resources that fledgling/emerging contractors may lack
- The contractor who performs the physical work, or aspects thereof, has a contract with the employer
- There is no contract between the third party support and the contractor
- The contractor supported by third party management may be collectively regarded as being a 'prime contractor'

Combining contract type and class: The type and class of prime contracts may be combined as follows:

- Prime (International)
- Prime (Major)
- Prime (Minor)
- Prime (Micro)

Typically prime (micro) contracts are aimed at providing work opportunities for small and micro enterprises operating as prime contractors, prime (minor) contracts for small and medium enterprises and prime (major) contracts for medium and large enterprises.

Implications of the contract classification: The system of contract classification can be used as a tool for redressing the skewed nature of the economy. Development contracts can be used to facilitate the successive introduction of labour, transport, materials, plant and finance to community-based/developing enterprises in structured programmes. Certainly, the associated contractual arrangements will permit such enterprises through the execution of contracts to establish themselves and to acquire the necessary skills in respect of materials supply, materials management and construction management.

Work opportunities can be created for those exiting such programmes to ensure the sustainability of the enterprises that have been developed. This can be achieved by making prime contracts (micro and minor) accessible to those who have been developed through development contracts and by requiring prime contractors operating in the prime (major) class of contract to make use of the services of developing contractors.

The contract classification system can also be effectively utilized to create work opportunities for targeted groups and individuals without guaranteeing them work.

The classification of contracts on the basis of risk permits the level of performance bonds to be varied without exposing the client body to unacceptable risk, viz:

- Prime (major and international): 10 per cent
- Prime (minor) – contract value < R1 million: 2,5 per cent
- Prime (minor) – contract value between R1 million and R2 million: five per cent
- Prime (micro): nil
- Structured joint venture: 10 per cent
- Development: nil

It should be noted in development contracts that third party management support is frequently required to carry professional indemnity insurance.

Development objective/price mechanisms

A development objective/price mechanism is a point-scoring system in terms of which tenderers are awarded points in the first instance for their financial offer and in the second instance for their offer to exceed socio-economic objectives or their current enterprise status.

Development objective points are awarded to tenderers who exceed minimum goals set in terms of resource specifications in order to encourage tenderers to make the optimum economic use of one or more of the following in the performance of the contract:

- Local labour
- Targeted labour
- Local resources
- Affirmable business enterprises (small, medium and micro enterprises owned and controlled by blacks)
- Targeted enterprises

In this manner the premium payable for incorporating socio-economic objectives into projects is minimized, as tenderers compete on the basis of both price and meeting socio-economic objectives. Market forces dictate the degree to which contractors can meet socio-economic objectives in the most cost-effective manner.

Development objective points can also be awarded to enterprises on the basis of their status as an affirmative business enterprise or the amount of women equity ownership within an enterprise. The use of the development objective/price mechanism in this instance is a direct preference. Although the target group receives a price preference, they nevertheless have to submit competitive tenders to be awarded contracts.

The successful tender is the one that is awarded the most points, subject always to technical factors, previous contractual performance/recommendations, financial references, unit rates and prices, alternative offers, qualifications, etc being acceptable. This system of tender adjudication replaces the practice of awarding the tender to the lowest priced offer, as it permits resource-based/socio-economic objective offers to be considered together with the financial offer.

The use of a development objective/price mechanism:

- Enables tenderers to use their skill, knowledge and creativity in arriving at a favourable mix between economic and development objectives
- Penalizes those persons who fall outside the targeted groups, or who offer to meet certain socio-economic objectives to only a limited degree, but does not preclude them from tendering (ie engaging in economic activity) in a meaningful manner
- Prevents those who fall within a targeted group from presenting grossly uncompetitive tender prices, as the reward for compliance with socio-economic objectives will be outweighed by the loss of points incurred through uncompetitive tender prices

Points awarded for financial offer: Points awarded in respect of the financial offer are calculated as follows:

$$Np = Z(1 - (P - Pm) / Pm)$$

where:

Np = the number of tender adjudication points awarded on the basis of price

Pm = the price of the lowest responsive tender adjusted to a common base, if applicable

P = the price of the responsive tender under consideration adjusted to a common base, if applicable

Z = a number, usually 90

Points awarded for development objectives: The maximum number of development objective points awarded to a tenderer should in general not exceed 10. Points awarded in terms of an enterprise's status in prime (minor) and prime (micro) contracts are fixed in respect of affirmable business enterprises and vary, depending on the ownership percentages, in respect of women equity ownership. Points awarded in respect of increased resource goals in prime (major) and structured joint venture contracts where use is made of the APP1, APP2, APP3, APP4 and APP5 specifications are awarded in terms of the following formula:

$$Nc = X(D - Ds) / CY - Ds$$

where:

Nc = number of tender adjudication points awarded

D = the tendered goal percentage in the tender under consideration

Ds = the specified minimum goal percentage

X = maximum number of adjudication points assigned for the socio-economic aspect of the tender (usually 10 points)

Y = goal percentage above which no further tender adjudication points are awarded

In terms of the above formula, tenderers obtain the maximum number of points (Nc) should they tender a goal of Y per cent and have no advantage over their competitors should they tender a value in excess of Y per cent.

Unbundling strategies (breakout procurement)

Small, medium and micro enterprises can participate in public sector procurement in one of two ways. They can either contract directly with an organ of state or participate as a subcontractor, supplier or service provider to a prime contractor in the delivery chain.

The breaking down of tenders into smaller components is not always justifiable, owing to the division of responsibilities, interdependence of activities, programming, duplication of establishment charges and underutilization of resources. Furthermore, the administration of such contracts by organs of state and their agents is more complex and costly than that of fewer larger ones.

Targeted procurement strategies enable contracts to be unbundled in a number of ways, viz:

- By procuring works in the smallest practicable quantities (prime (minor and micro))
- By obligating prime contractors to engage targeted businesses in the performance of their contracts (prime (major) with APP1 and APP4 specifications)
- By requiring joint venture formation between established businesses and targeted emerging business enterprises (structured joint ventures with APP2 and APP3 specifications)
- By providing third party management support for enterprises that are not capable of operating as prime contractors (development contracts)

The options that make use of resource specifications require prime contractors to 'unpack' their contracts into smaller contracts and to procure the services of small, medium and micro enterprises to perform such contracts and administer them. These unbundling strategies afford the full spectrum of small, medium and micro contractors, ie those operating as labour only contractors to those operating as prime contractors, opportunities of participation.

Standard delivery options

Contract classification is a form of targeting and can as such be used to secure in an indirect manner work for contractors who are operating within certain sectors in the construction industry. For example, development contracts are aimed at fledgling contractors who carry no significant overhead costs and do not have in their employ persons with the necessary management skills to perform all the materials procurement and construction management functions required in prime contracts. Established contractors who possess these resources carry higher associated overhead costs and contracting capacities and as such are not attracted to this type of contract. Furthermore, they normally cannot match the tendered prices of the targeted group.

The standard delivery options for various targeted groups are as set out in Table 1. The framework can be used to create work opportunities for targeted groups and individuals.

Table 1: Standard delivery options: Engineering and construction works contracts

Contract		Targeting options	
Type	Class	Target	Human resource specifications
Prime	Major	SMMs owned and controlled by previously disadvantaged individuals	APP1: Targeting of Affirmable Business Enterprises
		Local resources (ie local enterprises, manufacturing and labour)	APP4: Targeting of Local Resources
		Increase in number of person-hours employed generated per unit of expenditure Local labour	APP5: Engagement of Targeted Labour
Prime	Minor	Small and medium enterprises, particularly those having women equity ownership or owned and controlled by previously disadvantaged individuals	–
Prime	Micro	Small and micro enterprises, particularly those having women equity ownership or owned and controlled by previously disadvantaged individuals	–
Structured joint venture	–	Emerging enterprises owned and controlled by previously disadvantaged individuals	APP2: Joint Ventures (General)
		Specific emerging enterprises	APP3: Joint Ventures (Targeted)
Development	–	Emerging/fledgling/embryonic enterprises or aspirant entrepreneurs who do not have the capabilities or resources to contract as prime contractors	–

Promoting employment-intensive practices

Methods and technologies

Employment-intensive methods and technologies have been used in South Africa on construction projects that include rural gravel roads, low level bridges, small dams, residential township roads (surfaced and gravel), water and sewer reticulation for townships, bituminous surfacing of roads, low voltage electrical reticulations, stormwater drainage systems, and on-site sanitation. Road maintenance projects have included regravelling and routine road maintenance (Watermeyer, 1997a).

Changes in methods and technologies, which increase the labour content in construction and in the manufacture of materials, yield the greatest increase in the number of employment opportunities generated per unit of expenditure. This requires well established companies to change their work methods and to reduce their reliance on capital-intensive technologies. Such methods and technologies are usually readily implemented by small-scale enterprises, which, being small, have limited access to capital and invariably operate and conduct their business in a more employment-intensive fashion and favour light equipment-based forms of construction.

Approaches to implementation

The choice of technology is generally made during the basic design phase of works contracts, whereas the choice of construction method/method of manufacture is usually decided upon during the construction phase. Two alternative approaches to implementing labour-based works can be adopted.

- Method 1: Lay down the use of specific employment-intensive technologies and

methods of construction/manufacture in the contract document.

- Method 2: Afford tenderers the opportunity to choose the technology/construction method/method of materials manufacture they wish to use in order to implement employment-intensive methods and to reward them for the degree to which they embrace such technologies.

Either method may be used to increase the quantity of employment generated per unit of expenditure. Method 1 usually achieves the objective by restricting the use of certain types of plant/manufacturing methods and by specifying particular technologies. Method 2, on the other hand, by means of development objective/price mechanisms and the APP5 specification, enables tenderers to tender the amount of labour they undertake to engage in the performance of the contract and to be rewarded at tender stage for this. Method 2 accordingly permits tenderers to use their knowledge, skill and creativity in arriving at an optimum economic mix of equipment, technologies and labour in order to meet their obligations, eg a tenderer on a roads contract may choose to manufacture kerbs and precast concrete components on site rather than to excavate the box cut for the road by hand in order to provide employment for a target group.

Method 1 is well suited to the targeting of local labour. The economic viability of this approach is, however, dependent on the ability of the designer/specifier to forecast cost. Method 2 can be used for the employment of relatively unskilled labour and any potential price premium can be readily assessed during the adjudication of tenders. Method 2 therefore has the distinct advantage that tender prices will usually fall within acceptable limits and an economic justification of decisions relating to employment generation will not be necessary. Method 1 runs the risk that tenderers may outprice some technologies that do not suit their companies in an effort to dissuade an organ of state from utilizing certain labour-based technologies (Watermeyer, 1997a, 1997b).

Encouraging contractors to make more use of targeted labour in excavation activities

In order to meet goals for the engagement of targeted labour or to tender increased goals, contractors may have to undertake some, or all, soft excavations by the use of hand labour. In order to minimize their risk exposure to performing such activities, there needs to be:

- A labour policy in place that sets out the conditions of employment for temporary workers (ie project specific workers)
- A mechanism in terms of which contractors can define the portion of the excavation works that will be excavated by hand methods

If this is not done, contractors will not be able to increase job opportunities in earthworks activities, as they would be exposed to unacceptable risks. The above-mentioned employment policy and mechanism should accordingly be clearly set out in the tender documents and form an integral part of the contract.

A suitable mechanism to enable contractors to define portions of excavation work that may be excavated by hand methods is to permit contractors during the tender stage to nominate the quantity of materials they wish to execute using hand methods. The approach outlined below is suggested.

The initial classification of material to be excavated should be in accordance with the relevant provisions of standard earthworks specifications such as SABS 1200 D and 1200 DA. However, soft excavation to be undertaken by hand labour, using hand tools, can be further broken down by the introduction of an additional class of material, viz soft excavation Class A material, which, using a pick or equivalent hand swing tool, can be excavated with difficulty, in accordance with the provisions of the project

Table 2: Criteria for classifying materials as soft class A excavation (Watermeyer, 1997)

Material type	Granular materials	Cohesive materials
Dynamic cone penetrometer – minimum number of blows required to penetrate 100 mm	7-15	6-8
Consistency	Dense – high resistance to penetration by the point of a geological pick; several blows required for removal of material	Stiff/Very stiff Stiff – can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers Very stiff – indented by thumb-nail with difficulty; slight penetration of point produced by blow of geological pick

specification as tabulated in Table 2 (Watermeyer, 1997a, 1997b).

The total estimated quantity of excavation, as classified in terms of a standard earthworks specification, should be indicated in the schedules. The tenderer should be permitted to subdivide this quantity into two components, viz the quantity of material to be excavated by the use of powered, mechanical equipment and the quantity to be excavated by hand labour using hand tools. One third of every quantity of excavation to be undertaken by hand labour should be entered against the appropriate extra-over items provided in the schedules, but left blank, for soft excavation Class A. This will ensure that material that can be picked with difficulty is catered for and the transition from hand excavation to machine excavation is graded.

Should the tenderer fail to indicate a quantity of excavation to be undertaken by hand labour, notwithstanding that he would find it necessary to utilize hand labour, it will be assumed that all excavation, whether undertaken by machine or by hand labour, is to be paid for at the rates tendered for machine excavation.

The contractor should be required to undertake at least the quantities of excavation by hand labour that he tendered, unless the total quantity of excavation proves to be less than scheduled, in which case the minimum quantity to be undertaken by hand labour will be reduced pro rata by the employer's representative. This procedure will also provide a basis for reducing targeted labour goals should such adjustments be necessary.

Should the total quantity of excavation prove to be greater than scheduled, the contractor may choose the method of excavation for the excess quantity, unless the rates for excavation by machine would result in lower costs than hand excavation, in which case the employer's representative will have the right to instruct the contractor to undertake the excavation by machine.

The role of targeted procurement in promoting employment-intensive practices

Targeted procurement provides strategies not only for increasing employment opportunities per unit of expenditure and the targeting of local labour, but also for the engagement of small and micro enterprises in a cost-effective manner on large contracts. Small and micro enterprises are the sector of industry that is most likely to implement employment-intensive technologies. The aforementioned strategies compel medium and large enterprises either to embrace employment-intensive technologies or to outsource to smaller companies, specializing in such technologies, in order to secure a competitive advantage over their competitors (Watermeyer, 1997a, 1997b).

Implementing affirmative procurement in South Africa

National Department of Public Works

The urgency to provide a correctional services facility comprising a prison and staff accommodation required the Department of Public Works to adopt a 'develop and build' contracting strategy. This type of contract was expected to attract only large established contractors, without the meaningful participation of small emerging enterprises. (The total value of the two contracts amounted to R190 million; the contract period was one year).

The Procurement Task Team developed the APP1 resource specification in January 1996 to secure the participation of affirmable business enterprises (ABE) (businesses owned and controlled by previously disadvantaged persons (PDI) whose annual average turnovers are within prescribed limits) on these contracts. The APP1 specification required contractors to secure ABE participation in one or more of the following ways:

- Subcontracting portions of the contract to ABEs
- Obtaining supplies and materials from ABEs
- Obtaining manufactured articles from ABE manufacturers
- Engaging ABE professional, technical or managerial service providers
- Entering into joint venture arrangements with one or more ABEs

Tenders were adjudicated in terms of a development objective price mechanism. A minimum goal of 10 per cent (percentage of the rand value of the contract to be expended on the engagement of ABEs) was set. No further adjudication points were awarded to tenderers who exceeded a goal of 40 per cent. The successful tenderer on each contract tendered the lowest financial offer and the highest contract participation goal, viz 38,5 per cent in respect of the R152 million prison contract and 40 per cent in respect of the R38 million housing contract (Letchmiah, 1997).

The successful tenderers instituted a contractor development programme in order to attain their contractual goals, as there were very few businesses in the area that complied with the ABE definition. As such, the

successful tenderers on both contracts, of their own volition, performed certain construction and materials management functions for ABEs who required support in order to secure their participation.

In August 1996, the State Tender Board gave approval to the National Department of Public Works piloting the implementation of the Affirmative Procurement Policy on all its construction projects. During the period August 1996 to October 1997, 3 423 building and civil contracts with a total value of R914,5 million were awarded, utilizing the Affirmative Procurement Policy specifications, a breakdown of which is given in Table 3. (Quotations refer to low-value contracts that were concluded without following the formal tendering procedures applicable to contracts with a monetary value above a certain threshold.)

Table 3: Statistics pertaining to all tenders awarded (during the period August 1996 to October 1997)

Contract value	No of contracts awarded	Tender value	
		(R million)	(%)
R0-R45 000	2 729	R25,9	2,8
R45 000-R100 000	256	R18,7	2,0
R100 000-R0,5 million	308	R59,4	6,5
R0,5 million-R2,0 million	75	R73,4	8,0
> R2,0 million	55	R737,1	80,7
Total	3 423	R914,5	100,0

An independent review of the department's records concerning the award of these 3 423 contracts was undertaken. A random sample of 898 records was electronically captured and analysed. Although this sample in number covered only 26 per cent of the total departmental record, it represented 79 per cent of the monetary value of the record and captured just over two thirds of the contracts that fell outside the quotation category and 80 per cent of the contracts with a contract value in excess of R2 million. The statistics generated by this review are reflected in Tables 4 to 7. It should be noted that the category for quotations has been omitted from Tables 6 and 7 and the small sample number in some instances may distort some of the statistics.

Table 4: ABE participation (August 1996 to October 1997)

Contract value	Cost premium (%)	Percentage of contracts awarded to ABEs	Percentage of total tender value awarded to ABEs
R0-R45 000	0,2	34	20
R45 000-R100 000	0,9	8	8
R100 000-R0,5 million	1,5	12	11
R0,5 million-R2,0 million	1,3	12	11
> R2,0 million	0,7	—	30
Total	0,8	—	28

Table 5: ABE participation over different periods

Contract value	Up to 31 March 1997		1 April 1997 and after	
	Percentage of contracts awarded to ABEs	Percentage of total tender value awarded to ABEs	Percentage of contracts awarded to ABEs	Percentage of total tender value awarded to ABEs
R45 000-R100 000	6	6	21	19
R100 000-R0,5 million	10	10	21	20
R0,5 million-R2,0 million	13	14	8	3
> R2,0 million	—	30	—	38
Total	—	27	—	32

Table 6: ABE participation on a sectoral basis

Type	Sample number	Total value (R million)	Percentage ABE participation
Building	330	614,0	30
Civil	9	11,2	6
Electrical	37	8,2	1
Mechanical	87	53,5	2
Total	463	686,9	28

Table 7: ABE participation levels on a provincial basis

Province	Sample number	Total vlaue (R million)	Percentage ABE participation
Eastern Cape	138	93,6	23
Free State	13	9,2	21
Gauteng	69	258,7	22
KwaZulu-Natal	72	38,7	17
Mpumalanga	19	6,9	27
Northern Cape	23	4,8	19
North West	12	12,9	23
Northern Province	26	17,1	11
Western Cape	98	249,1	35
Total	470	691,0	28

Various construction companies were approached in order to establish how much work was outsourced to ABEs prior to the introduction of the Affirmative Procurement Policy. One large construction company, based on an examination of their company records, put forward the figures reproduced in Table 8 (Burman, 1998). Another large building construction company, based on an analysis of their records, reported a figure of three per cent prior to 1997 (Howie, 1998). Discussions with a number of contractors indicated that there is general consensus that ABE participation levels in the building industry prior to the introduction of the Affirmative Procurement Policy was around three per cent. This being the case, the introduction of the Affirmative Procurement Policy on contracts with a value in excess of R2 million has resulted in a tenfold increase in ABE participation on departmental contracts.

Table 8: ABE participation in a large building and civil engineering construction company for the period 1994-1998 (Burnam, 1998)

Category of work	Estimated ABE participation (percentage of turnover)				
	1994	1995	1996	1997	1998
Roads	1,0	1,0	1,5	2,8	4,0
Building	–	0,25	1,5	3,0	4,25
Civil engineering	0,5	1,0	1,5	2,5	2,5

When the programme commenced in August 1996, some commentators in the construction industry predicted that a cost premium of between 10 and 15 per cent would be incurred by the implementation of the policy. Table 4 reveals that the overall financial premium that was paid over this period was a mere 0,8 per cent.

Southern Metropolitan Local Council

The Southern Metropolitan Local Council of the Greater Johannesburg Council incorporates areas that were administered inter alia by the former Soweto City Council, Lenasia Town Council and Ennerdale Town Council. During the 1996/97 financial year, the capital expenditure in respect of the water, sewer, roads, parks and cleansing departments amounted to approximately R140 million including non-recoverable VAT (VAT is recoverable on water and sanitation projects). The Council adopted the Ten Point Plan and implemented affirmative procurement on its capital works projects from November 1996 onwards. The Council, in order to simplify the implementation, opted to use only the APP1 and APP5 specifications on prime (major) contracts.

The former Soweto City Council had launched a contractor development programme (CDP) during 1988 (Watermeyer et al, 1995; Watermeyer and Band, 1994) involving the upgrading of approximately two thirds of the secondary water mains. Soweto's contractor development programme is a unique programme that embraces labour-intensive methods and labour-based technologies. It furthermore encourages and trains the community to participate in the managerial, commercial and administrative aspects of construction. The programme, by its very structure, increases the labour content of a construction project and at the same time trains local entrepreneurs in labour-based construction methods of installing services. In this way, technical, commercial, managerial and administrative skills are developed within the community with a concomitant increase in earning capacity. At the same time, the community retains and cycles a significant proportion of the money spent on a project. Local entrepreneurs who are from the outset employers in the community can, with sufficient technical and financial support and instruction, become fully fledged contractors and, as such, provide greater earning opportu-

nities for others in the community. Thus the project may be described as a job creation programme with the potential for sustainability through entrepreneurial development.

The programme objectives of the CDP (Watermeyer et al, 1995) may be described as being to structure and to execute construction projects using labour-based technologies and labour-intensive methods in such a manner that through the construction process:

- Employment and entrepreneurial opportunities are created for members of the community
- Skills and competencies in technical, commercial, managerial and administrative areas are transferred to participants
- The percentage of the construction cost retained by the community is maximized

Project objectives, on the other hand, may be described as being to have the works constructed to specification within a specified period and a given budget using community-based contractors and labour-based construction practices in such a manner that:

- Opportunities for employment and training are created for the local community
- As much as possible of the project expenditure is retained by the community
- Community-based contractors (local entrepreneurs) are developed from within the community
- A sense of participation within the community is fostered
- Members of the local community are, as far as is practicable, employed by those providing construction and materials management services

The programme provides for third party management support where emerging/community contractors are unable to operate as prime contractors and permits the successive introduction to participants of labour, transport, materials, plant and finance.

It envisages five levels of contract (Watermeyer 1992; Watermeyer and Band 1994), viz:

- Level 1: labour only
- Level 2: labour plus transport of materials to site
- Level 3: labour plus transport plus materials (assisted)
- Level 4: labour plus transport plus materials (unassisted)
- Level 5: labour plus transport plus materials plus full surety

The CDP is totally compatible with the Procurement Forum's Ten Point Plan. Level 1 to level 3 contracts may, in terms of the Ten Point Plan, be classified as development contracts and level 4 and 5 contracts as prime (minor) contracts.

The CDP has enabled local contractors to develop and be fully integrated into the mainstream of the economy. Currently, the most successful company to emerge from this programme enjoys an annual turnover of approximately R23 million. The programme has also been particularly effective in permitting a substantial portion of the construction cost to be retained by the community (37 to 50 per cent, depending upon the nature of the works) and has resulted in a cost per manhour of employment generated per unit of expenditure on road construction and water distribution projects equal to approximately half the average for the civil engineering industry as a whole (Watermeyer et al, 1995).

Twelve development contracts for the construction of secondary water mains with a labour only contract value of R6,9 million were awarded. The total cost of the development contracts (ie cost of labour, materials supply, plant and materials and construction and management) amounted to approximately 20 per cent of the capital budget. Several local firms that had been developed through the contractor development programme were awarded prime (major) and prime (minor) contracts with little or no cost premium.

The Southern Metropolitan Local Council defined target labour as *South African citizens residing within the geographical area over which the SMLC has jurisdiction and who earn less than R9,00 per hour*. The targeted labour goals (rand value of wages and allowances for which the contractor contracts to engage targeted labour in the performance of the contract, expressed as a percentage of the net tender value) of the successful tenderer and the cost premium associated with the first nine tenders called for in this manner are reproduced in Table 9. As tenderers become more familiar with the system and become more experienced in managing targeted labour, the targeted labour goals achieved are expected to increase (Watermeyer, 1997a). The cost premium of a mere 0,5 per cent to secure an average targeted labour goal of 13 per cent demonstrates the effectiveness of targeted

procurement in this regard.

The use of affirmative procurement in cost-reimbursable contracts and design, build, finance and operate

Design, build, finance and operate

The Department of Public Works has embarked upon a form of public-private partnerships in the procurement of facilities for the Department of Correctional Services. It developed a specialized form of public-private partnership aimed at procuring specialized services where asset provision is incidental to the service provision, namely Asset Procurement and Operating Partnerships (APOPS) (Gounden 1997c). In essence, APOPS procures services on a design, build, finance and operate basis. Four correctional services facilities are currently being procured using this form of partnership.

A comprehensive resource specification for securing the participation of previously disadvantaged enterprises was prepared and issued to shortlisted respondents. This specification set the following minimum contract participation goals with respect to the engagement of previously disadvantaged enterprises:

- 25 per cent in respect of the design and build phase; and
- Five per cent in respect of the operational phase rising in linear increments to 25 per cent after five years of operation

The specification defined affirmable business enterprises as a subset of previously disadvantaged enterprises and local enterprises as a subset of affirmable business enterprises. Various minimum percentage participation levels were set in respect of affirmable business enterprises and local enterprises. Weightings were also provided as incentives to engage previously disadvantaged enterprises owned and controlled by 'black Africans'.

Financial penalties are provided to penalize those who fail to achieve their goal obligations. Use was also made of the APP5 specification (Engagement of Targeted Labour) to secure the employment of previously disadvantaged persons who reside within a 75 km radius of the site.

Rapid delivery procurement systems

The Department of Public Works is often faced with situations where it is required to respond urgently to effect repairs or new works to remedy or alleviate situations that may arise from:

- A natural event, such as a flood or earthquake
- The failure of a facility or service, such as a structure, a road or a dam
- An accident
- Failure over an extended period to carry out essential maintenance and upgrading of a facility
- Failure to timeously repair or provide an asset

The Department together with members of the Procurement Task Team developed a Rapid Delivery Procurement System (RDPS) to respond to these emergency situations where time to commence and complete projects is a major criterion. Use was made of the Institution of Civil Engineering's Engineering and Construction Contract (NEC) to enable the Department to put work out on a cost-reimbursable basis (option E). This approach enabled tenders to be called for on a competitive basis without the exact scope of the works having to be defined.

The Rapid Delivery Procurement System was first used on a series of projects totalling R95 million for repairs to and the rebuilding of various police stations in the Eastern Cape during June 1996. Socio-economic objectives on these projects were achieved by specifying fixed contractual goals in respect of targeted enterprises and local labour. Use was made of the APP1 (Engagement of Affirmable Business Enterprises) and the APP4 (Targeting of Local Resources) specifications in this regard. A financial incentive was provided to reward contractors for exceeding the minimum contract participation goal of 15 per cent set in respect of affirmable business enterprises. The average amount paid in respect of targeted labour and affirmable business enterprises amounted to 17 and 20 per cent of the contract value respectively.

Measuring outcomes of affirmative procurement

Each of the Procurement Forum's resource specifications has a measurable component that enables the amount of participation by the target

Table 9: Recent tender results of nine municipal capital works projects where use was made of the APP5 specification (Watermeyer, 1997a)

Contract description	Tender value (R million)	Targeted labour goal (%)		Cost premium (%)
		Tendered	Minimum specified	
Construction of water mains	R3,6	5	5	Nil
Construction of roads and stormwater on an 'as and when' basis	R5,1	20	15	Nil
Construction of sewers	R1,7	15	5	Nil
Construction of sewers	R1,2	25	5	8
Construction of sewers	R1,7	10	5	Nil
Construction of sewers	R2,7	10	5	Nil
Construction of sewers	R1,6	10	5	Nil
Improvements to stormwater drainage	R1,2	20	7	1
Culvert repair	R1,4	4	4	Nil
Total	R20,2	13	8	(0,5)

group to be quantified. In each case, the value of the contribution is computed, in terms of a prescribed formula, as a monetary value (goal credits) and is expressed as a percentage of the total value of the goods and services provided or works performed in terms of the contract, as indicated in Table 10.

The goals associated with each specification can be readily audited and verified during the performance of a contract. They are not, however, a direct measure of the amount of money retained by or routed through the targeted group, as they contain certain distortions owing to bonus awards, credits for attaining affirmative action milestones, weightings and the like. They are nevertheless indicators of economic empowerment in terms of employment and/or business opportunities.

Although the APP1 to APP4 and APP6 specifications target different enterprises, they all target enterprises owned and controlled by the targeted group, viz previously disadvantaged individuals. The goals in each of these specifications can accordingly be used to quantify the economic empowerment of enterprises owned and controlled by previously disadvantaged individuals in procurement activities. The APP5 specification, on the other hand, targets labour drawn from the targeted group. An indicator of the economic empowerment of targeted groups through engineering construction works contracts can be computed as the sum of the following:

- Development contract: Rand value of contract
- Prime (micro): Rand value of contracts awarded to ABEs or enterprises with WEO
- Prime (minor): Rand value of contracts awarded to ABEs or enterprises with WEO
- Prime (major):
 - APP1: 90 per cent of goal credits or rand value of contract awarded to ABEs
 - APP2: 60 per cent of goal credits
 - APP3: 80 per cent of goal credits
 - APP4: 95 per cent of goal credits
 - APP5: 100 per cent of goal credits

On contracts where more than one goal is measured, only the goal that makes the maximum contribution to the empowerment indicator should be used.

The empowerment indicator (EI) would then be the sum of the above expressed as a percentage of the total contract value (excluding VAT). If the EIs are computed for contracts or portions of contracts executed in a given calendar year, then the increase/decrease in economic empowerment in a region can be monitored. Short, medium and long-term goals can be set. For example, an organ of state may establish that the current EI is 10 per cent and set a goal of 30 per cent for the year 2008. The progress towards attaining this goal can be monitored. A Californian Envelope can, for example, be used to set the predicted upper and lower bound goals for the intervening years. Training and development programmes can then be structured to ensure that the targets set for each year are achieved.

In effect, the EI measures the benefit the targeted group derives from procurement activities. As the EI measures the degree to which socio-economic objectives are met across the full spectrum of targeting strategies that have been formulated, it may be deduced that it measures the overall

degree to which government's stated objectives are met.

The application of targeted procurement beyond the borders of South Africa

The potential of targeted procurement to be used beyond South Africa's borders in developing countries is significant. All developing countries have a need for resource-based construction in order to grow their economies. The methodology for targeted procurement described for application in South Africa can be readily utilized in other countries without any substantial modifications. All that would be required is for certain definitions to be amended. For example, in South Africa an affirmable business enterprise is defined on the basis of ownership and control of previously disadvantaged persons and turnover limits. In Eastern Europe and sub-Saharan Africa, an affirmable business enterprise could be defined on the basis of ownership and control of indigenous people with or without specific turnover limits.

The Namibian government has embarked upon a process to develop a policy on labour-based works and has published a Green Paper (Department of Transport, 1997) in this regard. The objective of this policy is to *improve living standards in a sustainable way through increasing income generation and employment opportunities, where technically and economically feasible, for the poor and marginalized sectors of Namibian society, in a focused and targeted manner*. The paper identifies targeted procurement as a key strategy to implement labour-based works.

Conclusion

Targeted procurement in a practical and pragmatic manner affirms the changed environment in South Africa, government's socio-economic objectives and the principles of the RDP in engineering and construction works contracts. It enables organs of state to operationalize policies in a targeted, transparent, visible and measurable manner when engaging in economic activity with the private sector, without compromising principles such as fairness, competition, cost-efficiency and inclusion.

Targeted Procurement comprises participative programmes aimed at

the engagement of small, medium and micro enterprises owned by previously disadvantaged persons and the increasing of the volume of work available to the poor and the income generation of marginalized sectors of society.

The key elements of targeted procurement are:

1. The recognition that procurement can be used as an instrument of government policy
2. The use of development objective/price mechanisms to measure a tenderer's resource and financial offer
3. The use of resource specifications to secure the participation of the targeted groups
4. The classification of contracts in order to ensure that participation opportunities are provided for the full spectrum of entrepreneurs

Targeted procurement has two main legs:

- A development component, which ensures that the targeted group is capable of participation
- A structured participation component, which ensures that the target group is engaged in engineering and construction works contracts

Increased and targeted employment opportunities can be generated in engineering and construction works projects by:

- Encouraging the substitution of labour for capital and local resources for imports
- Substituting the use of 'labour-friendly' technologies that utilize a higher degree of labour input than conventional technologies or are well suited to implementation by small-scale enterprises
- Encouraging and developing small-scale enterprises to implement employment-intensive practices and 'labour-intensive' technologies

Targeted procurement that makes use of resource specifications and development objective/price mechanisms can be used to encourage cost-effective employment-intensive practices when outsourcing work to the private sector. It can also facilitate significant levels of participation by tar-

Table 10: Resource specification goals and goal credits

Human resource specification	Goal	Goal credits
APP1: Targeting of affirmable business enterprises	Contract participation goal	Combination of: • Rand value of work performed as an ABE prime contractor and 10% of work subcontracted to non-ABEs • 50% of rand value of expenditure on ABE suppliers and 100% on all other ABEs • Rand value of work performed by joint venture multiplied by the participation parameter • 10% bonus for ABEs with 100% PDI ownership • Credits that may be granted in accordance with a prescribed formula where non-ABE firms have achieved certain affirmative action milestones
APP2: Joint ventures (general)	Joint venture participation goal	Sum of: • Rand value of individual affirmable joint venture partner's participation parameter multiplied by the net tender value plus 10% bonus if affirmable joint venture partner has 100% PDI ownership plus 15% bonus if affirmable joint venture partner is an ABE • Bonus credits in respect of rand value of materials supplied by an ABE manufacturer and service provider and 50% of rand value of expenditure on ABE supplier subject to a maximum value of 10% of the net tender value
APP3: Joint ventures (targeted)	Targeted joint venture partners	Sum of: • Rand value of individual targeted joint venture participation parameter multiplied by the net tender value (The participation fraction is a fraction of the value of the work performed by a joint venture that may be used to represent the value of the contribution made by the targeted partner) • Bonus credits in respect of rand value of materials supplied by an ABE manufacturer and service provider and 50% of rand value of expenditure as ABE supplier subject to a maximum value of 10% of the net tender value
APP4: Targeting of local resources	Local resource goal	Sum of: • Rand value of work performed by local enterprises, multiplied by weighting factors, if any • 50% of rand value of expenditure on local suppliers, multiplied by weighting factors, if any • Rand value of wages and allowances paid to targeted labour, multiplied by weighting factors, if any
APP5: Engagement of targeted labour	Targeted labour goal	Rand value of wages and allowances paid to targeted labour, multiplied by weighting factors, if any
APP6: Targeting of professional service providers	Professional services participation goal	Combination of: • Rand value of work performed by an APSP or subcontracted to an APSP • Rand value of joint venture multiplied by the participation parameter • 10% bonus for APSPs with 100% PDI ownership • Credits that may be granted in accordance with a prescribed formula where non-APSP firms have achieved affirmative action milestone credits

geted enterprises ranging from labour only contractors to prime contractors. It also ensures that any enterprises that are developed in development programmes have access to markets, provided they remain competitive.

The cost premiums associated with targeted procurement in the case studies presented are relatively insignificant and fully justify the investment in socio-economic objectives. The levels of participation achieved have been significant. The methodology permits the attainment of socio-economic objectives to be monitored and measured against milestones and targets. This feature can be utilized to set long-term goals for programmes of public expenditure on engineering and construction contracts and enables progress towards the attainment of such goals to be measured, quantified, verified and audited at discreet intervals.

Targeted procurement, without resorting to set-asides, can be used in an effective, efficient, transparent and cost-effective manner to ensure that all public funds are expended on engineering and construction contracts in such a manner that all segments of the South African population can benefit through job creation and commercial activity in a focused manner. It makes the tender process accessible to the target group without guaranteeing work and links the flow of money into targeted business enterprises with a concomitant flow of responsibility. It is a flexible form of procurement and can be utilized in contracting strategies ranging from traditional preplanned contracts to design and build contracts and from cost-reimbursable contracts to design, build, finance and operate contracts.

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